

Appl. No. 09/961,113
Response to 8/03/2006 Office Action

In the Specification

Please amend the specification as follows:

The paragraph beginning at page 7, line 16:

Fig. 1 illustrates a wireless communications system 10 embodying the invention. Communications system 10 includes a first transponder including an interrogator 26 and a host computer 48 in communication with interrogator 26. Communications system 10 further includes an electronic communications device 12, such as the device disclosed in U.S. Patent Application Serial No. 08/705,043, filed August 29, 1996. In one embodiment, wireless communications device 12 comprises a wireless identification device such as the Microstamp (TM) integrated circuit available from ~~Micron Communications, Inc.~~ MICRON COMMUNICATIONS, INC., 3176 S. Denver Way, Boise, Idaho 83705. Interrogator 26 communicates with the communications device 12 via an electromagnetic link, such as via an RF link (e.g., at microwave frequencies, in one embodiment). While other embodiments are possible, in the illustrated embodiment the communications device 12 includes a transponder 16 having a receiver 30 and a transmitter 32 (Fig. 4). Communications device 12 further includes a power source 18 connected to transponder 16 to supply power to transponder 16. Communications device 12 further includes at least one antenna connected to transponder 16 for wireless transmission and reception. In the illustrated embodiment, communications device 12 includes at least one antenna 46 connected to transponder 16 for radio frequency transmission by transponder 16, and at least one receive antenna 44 connected to transponder 16 for radio frequency reception by transponder 16. In the illustrated embodiment, the transmit antenna 46 is a dipole

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antenna, and the receive antenna 44 is a loop antenna. In the illustrated embodiment, the transponder 16 is in the form of an integrated circuit. However, in alternative embodiments, all of the circuitry of transponder 16 is not necessarily all included in a single integrated circuit.

The paragraph beginning at page 10, line 22:

In the embodiment illustrated in Fig. 1, multiple communications devices 12 can be employed; however, there is no communication between multiple devices 12. Instead, the multiple communications devices 12 communicate with interrogator 26. Fig. 1 illustrates the communications device 12 as being in the housing 20 of Fig. 3. The system would operate in a similar manner if the device 12 is provided in a housing such as the housing [[10]] of Fig. 2, or any other appropriate housing. Multiple communications devices 12 can be used in the same field of an interrogator 26 (i.e., within communications range of an interrogator 26). Similarly, multiple interrogators 26 can be in proximity to one or more of the devices 12.

The paragraph beginning at page 11, line 9:

The above described system 10 of Fig. 1 is advantageous over prior art devices that utilize magnetic field effect systems because, with the system 10, a greater range can be achieved, and more information can be obtained (instead of just an identification number).

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The paragraph beginning at page 11, line 13:

As a result, such a system 10 of Fig. 1 can be used, for example, to monitor large warehouse inventories having many unique products needing individual discrimination to determine the presence of particular items within a large lot of tagged products.

The paragraph beginning at page 18, line 12:

The interrogator uses an IEEE-1284 compatible port in EPP mode to communicate with a host computer [[48]] (e.g., host computer 48 of Fig. 1). The EPP circuitry 50 provides digital logic required to coordinate sending and receiving a message with transponder 16. The EPP circuitry 50 buffers data to transmit from host computer 48 (Fig. 1), converts the data to serial data, and encodes it. The EPP circuitry 50 then waits for data from the transponder 16, converts it to parallel, and transfers it to host computer 48 (Fig. 1). In one embodiment, messages include up to 64 bytes of data.

The paragraph beginning at page 26, line 4:

During continuous wave (CW) transmissions for the backscatter mode, modulator 77 is configured to apply the carrier signal to transmit antenna X1. Transponder 16 is operable to backscatter the signal with a DPSK modulated sub-carrier. Following receipt of the command communication signal from interrogator 26, communication device 12 can be configured to output a reply signal. In backscatter configurations, device 12 is operable to modulate the CW emission from interrogator 26. The backscattered reply signal is received via receive antenna R1 of interrogator 26.